

**Work Order ID 78681**

January-12-12 10:55:19 AM

**\*78681\***

Page 1

Item ID: D206-642-641

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Item Name: Replacement Skidtube

Stop **\*NS2\***

Start Date: 12/01/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 10/02/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan: M.L.JDate: 12/01/12 Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D3288

Rev G

100

0.00

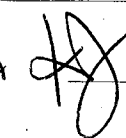
**\*100\***

DC

0.00

Document Control

Memo

Photocopy bluefile and create labels per PPP D206-642-641  
CHG003N/A 

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 78681

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Page 2

Item ID: D206-642-641

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**\*N900040100\***

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Item Name: Replacement Skidtube

Stop **\*NS2\***

Start Date: 12/01/2012 Start Qty: 1.00

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Required Date: 10/02/2012 Req'd Qty: 1.00

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Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***  
Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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110

0.00

**\*110\***

Skidtubes

Skidtubes

Memo

0.00

1-Deburr FWD edge of tube, grind bending marks.

2-Remove ridge on inside of fwd edge of tube as per Dwg D3288.

3-Weld Fwd Cap as per Dwg D3288. Grind to obtain proper fit  
A/R AL ROD Batch: M120164

4-Grind welds flush to cap on top surface only.

5-Cut Aft end as per Dwg D3288 from front of tube then deburr

6-Remove inner indexing ridge on aft end as per Dwg d3288

7-Open holes for aft cap as per Dwg D3288 using Dt8025

8-Drill pilot holes using DT8818

9- open float holes section J-J (6 per side) to 0.297" and aft cap holes to 0.208"

10-Insert D3286-1 doubler using DT8732 & DT8879, then locating doubler off  
the 3/16" holes cleco D3286-1 doubler remove DT8879

11-Working from center out, drill #30 holes into D3286-1 Doubler. cleco each  
hole after its drilled. Verify angle of holes to accomodate rivet heads.

12-Install DT8879 to hold doubler. Remove DT8732 then cleco doubler with  
#30 clecos. Remove DT8879 open GHW to 0.500"

BB

12/02/21

~~BB~~

~~12/02/17~~

BE 12/02/21  
BE 12/02/17

CF 12-2-21

DL 12/02/23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

**Work Order ID 78681****\*78681\***

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January-12-12 10:55:19 AM

Item ID: D206-642-641

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Item Name: Replacement Skidtube

Stop **\*NS2\***

Start Date: 12/01/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 10/02/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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13-Remove D3286-1 doubler, identify orientation, deburr then attach to W/O

14-Remove indexing edge as per Dwg D3288.

15-C'sink rivet holes as per Dwg D3288.

120

QC5- Inspect part completeness to step on W/O 0.00

**\*120\***

QC

Memo 0.00

Quality Control

130

Chemical Conversion Coat per QSI005 4.1 0.00

**\*130\***

HandFinish

Memo 0.00

Hand Finishing

DC 12/02/23

12 02 23

DC 12/02/23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Item Name: Replacement Skidtube

Stop **\*NS2\***

Start Date: 12/01/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 10/02/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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140

QC3- Inspect Part Finish

0.00

**\*140\***

QC

Memo

0.00

Quality Control

1 JB 12/02/23  
SAD

150

0.00

**\*150\***

Skidtubes

Memo

0.00

Skidtubes

1-Open Holes to finished size as per DWg D3288. Debur.

2-Locate, install and rivet doublers using DT8879 as per Dwg D3288. Micro-shave rivets as required.

3-Bond web in place as per Dwg D3288 & QSI 015.  
A/RSikaflex-291 119999



Sikaflex expire date: 12/08/13

Start: 12/02/24 Time: 9:02

Finish: \_\_\_\_\_ Time: \_\_\_\_\_

(Adhere for 12 hours)

OC 12/02/24

W/O: 78681		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
12/02/23	140	QC 3- QC 7 CHANGED						

Part No: D206-642-641 PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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NOTE: Date & initial all entries



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Item ID: D206-642-641

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Item Name: Replacement Skid tube

Stop **\*NS2\***

Start Date: 12/01/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 10/02/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

160

QC5- Inspect part completeness to step on W/O

0.00

**\*160\***

QC

Memo

0.00

Quality Control

170

0.00

**\*170\***

CNC Bend 1

Memo

0.00

CNC Delta 100 Bender

Bend tube using program D3288 as per Dwg D3288. Install drop pins in cross bolt spacer holes to maintain web position.

DP

12-2-27

DP

12-2-27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

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Item ID: D206-642-641

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Skidtube

Start Date: 12/01/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 10/02/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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180

0.00

**\*180\***

Skidtubes

**Memo**

0.00

1-Drill pilot holes for wearplates using D3288-T2 as per Dwg D3288, then open to Ø0.297". (without cutting fluid)  
DEBURR INSIDE OF HOLE AS NECESSARY (DO NOT ENLARGE HOLES)

2-C'sink X-bolt holes.

3-Deburr and remove alodine as required for welding

BB 12/04/28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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# Work Order ID 78681

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January-12-12 10:55:19 AM

Item ID: D206-642-641

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Item Name: Replacement Skidtube

Stop **\*NS2\***

Start Date: 12/01/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 10/02/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

190

0.00

**\*190\***

Skidtubes

Skidtubes

Memo

0.00

1-Insert D2649 & D3275-1 crossbolt spacers. Weld as per QSI 004 and Dwg D3288. Remember to back drill each hole before welding the other side. Use aluminum rod.

A/RAluminum Rod MB20164 BB 12/02/28

2-Using DT8733, insert (2) D3286-3 spacers as per QSI 004 and Dwg D3288. Remember to back drill each hole to Ø0.402" before welding other side. Use SS rod as required

A/RSS Rod NONE BB 12/02/28

3-Grind cross bolt welds flush as per Dwg D3288. Masking Tape access to inside of the skidtube

BB 12/02/28

4-Counterbore 5/16" x 0.750" deep using DT8747, except 8th cross bolt hole from Aft end, as per Dwg D3288.

200

QC5- Inspect part completeness to step on W/O

0.00

**\*200\***

QC

Memo

0.00

Quality Control

QC40

- Skidtube

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

# Work Order ID 78681

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January-12-12 10:55:19 AM

Item ID: D206-642-641

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Item Name: Replacement Skidtube

Stop **\*NS2\***

Start Date: 12/01/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 10/02/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

210 QC9- Inspect visual per QSI004- Fusion Welds 0.00

**\*210\***

QC

Memo

0.00

*12.02.29*

Quality Control

220 0.00

**\*220\***

HandFinish

Memo

0.00

Hand Finishing

*1 Q @ Pbk 12/03/01*

230 White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum 0.00

**\*230\***

Powdercoat

Memo

0.00

Powder Coating

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

*12:50  
3200F  
T=20*

*1X/m 12/03/01*

*m1 20222*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries



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**\*78681\***

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**Accept**

**\*N900040100\***

Setup Start \*NS1\*

Stop \*NS2\*

**Item Name:** Replacement Skidtube

**Start Date:** 12/01/2012      **Start Qty:** 1.00

**\* 1 \***

**Cust Item ID:**

**Required Date:** 10/02/2012      **Req'd Qty:** 1.00

\* 1 \*

**Customer:**

**Reference:**

**Approvals:**      **Process Plan:**                      **Date:**                      **Tooling:**                      **Date:**

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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240 QC3- Inspect Part Finish

0.00

**\*240\***

QC

## Memo

0.00

## Quality Control

250

0.00

**\*250\***

HandFinish

## Hand Finishing

## Memo

0.00

1-Install D3415-041 Nut Plate as per Dwg D3288 ,Install with LPS-3  
A/R LPS-3 Batch: M11V566

2-Install inserts Dwg D3288. Use a drop of Sikaflex inside insert holes  
A/RSikaflex-291 11119308  
Sikaflex expire date: 4/10

260

QC5- Inspect part completeness to step on W/O	0.00
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0.00

**\*260\***

QC

## Memo

0.00

## Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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## Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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**NOTE:** Date & initial all entries

# Work Order ID 78681

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January-12-12 10:55:19 AM

Item ID: D206-642-641 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Replacement Skidtube  
 Start Date: 12/01/2012 Start Qty: 1.00 \*1\* Cust Item ID:  
 Required Date: 10/02/2012 Req'd Qty: 1.00 \*1\* Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
290		0.00							
*290*									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D206-642-641								
	Location: _____								
	PPP Rev: _____								
300	QC21- Final Inspection - Work Order Release	0.00							
*300*									
QC	Memo	0.00							
Quality Control									

(TX) SP 12-03-6.

12/3/12

MF  
12-03-07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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NOTE: Date & initial all entries

# Picklist Print

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Work Order ID: 78681

\*78681\*

Parent Item: D206-642-641

\*D206-642-641\*

Parent Item Name: Replacement Skidtube

Start Date: 12/01/2012

Required Date: 10/02/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:B05.11.15 Added washers for aft cap, wearshoes and ring EC  
 IPP Rev:C 06-05-31 Revised steps JLM  
 IPP Rev:D 07-02-22 Added SS Wearplates & Gaskets JLM  
 IPP Rev:E 07-12-06 ECN 1080p DD verified by:ec  
 IPP Rev:F 08-04-17 as per PAR 08-015 DD verified by:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2620		Manufactured	No			110	Each	18.0000	1	1			
*D2620*									**				
Skidtube, 206 Skidtube													
											</		

D2647

Manufactured No

110

Each

158.0000

1

1

\*D2647\*

Cap

\*\*

Location	Loc Qty	Loc Code
LG002	157	
73826	48	
75482	109	

1  
 12/02/21 \*  
 12/02/21 \*  
 12/02/21 \*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

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Page 2

Work Order ID: 78681

\*78681\*

Parent Item: D206-642-641

\*D206-642-641\*

Parent Item Name: Replacement Skidtube

Start Date: 12/01/2012

Required Date: 10/02/2012

Start Qty: 1.00

Required Qty: 1.00

D3286-1

Manufactured No

110 Each

126.0000 2 2

\*D3286-1\*

Doubler

\*\*

DC 12/02/24

Location

Loc Qty

Loc Code

LG002

128

74872

6

75484

4

ST046

-2

76772

116

78014

150 Each

11,453.00 52

\*\*

2  
DC 12/02/24

CR3212-4-04

Purchased No

\*CR3212-4-04\*

Cherry Rivet

Location

Loc Qty

Loc Code

ST331

1463

116471

78

117816

3

118686

1

118840

16

119017

1355

119075

10

st510

9990

119075

9990

52

D3289-041

Manufactured No

150 Each

0.0000 1 1

\*D3289-041\*

Float Web (206A/B)

\*\*

DC 12/02/24

B80167

1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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January-12-12 10:55:22 AM

Work Order ID: 78681

**\*78681\***

Parent Item: D206-642-641

**\*D206-642-641\***

Parent Item Name: Replacement Skidtube

Start Date: 12/01/2012

Required Date: 10/02/2012

Start Qty: 1.00

Required Qty: 1.00

D2649                      Manufactured      No                      190              Each              580.0000              9              9

**\*D2649\***

Cross Bolt Spacer

**\*\***

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG	400	
77574	400	
LG001	161	
65317	1	
68224	2	
68507	11	
71355	2	
72704	2	
72841	11	
73390	8	
73857	21	
73858	53	
73859	4	
73860	4	
76793	42	

BE 12/2/12  
B79503  
B79504 x 8

D3275-1                      Manufactured      No                      190              Each              276.0000              6              6

**\*D3275-1\***

Crossbolt Spacer

**\*\***

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG002	276	
66930	106	
73393	118	
74437	52	

BE 12/2/12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

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Page 4

Work Order ID: 78681

**\*78681\***

Parent Item: D206-642-641

**\*D206-642-641\***

Parent Item Name: Replacement Skidtube

Start Date: 12/01/2012

Required Date: 10/02/2012

Start Qty: 1.00

Required Qty: 1.00

D3286-3

Manufactured No

190

Each

170.0000

2

2

**\*D3286-3\***

Spacer

\*\*

*BE 12/02/12*

Location

Loc Qty

Loc Code

LG

100

78015

100

*2*

LG001

68

74117

1

76773

67

D3415-041

Manufactured No

250

Each

29.0000

1

1

**\*D3415-041\***

Nut Plate

\*\*

*u 12/03/12*

Location

Loc Qty

Loc Code

ST042

29

67605

29

*✓1*

CCR264SS3-3

Purchased

No

250

Each

933.0000

2

2

**\*CCR264SS3-3\***

Cherry Rivet

\*\*

*u 12/03/12*

Location

Loc Qty

Loc Code

ST331

933

113973

2

117849

139

119017

792

*✓2*

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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# Picklist Print

January-12-12 10:55:23 AM

Work Order ID: 78681

**\*78681\***

Parent Item: D206-642-641

**\*D206-642-641\***

Parent Item Name: Replacement Skidtube

Start Date: 12/01/2012

Required Date: 10/02/2012

Start Qty: 1.00

Required Qty: 1.00

CR3212-4-03

Purchased

No

250

Each

1,702.000

2

2

**\*CR3212-4-03\***

Cherry Rivet

\*\*

*ul 12/03/02*

Location

Loc Qty

Loc Code

FP002

712

114859

712

*42*

ST331

990

110139

2

119017

988

ALS7-1032-130

Purchased

No

250

Each

2,472.000

64

64

**\*ALS7-1032-130\***

Insert

*ALS4-1032-130*

\*\*

*1102671(x64) ul 12/03/02*

Location

Loc Qty

Loc Code

ST280

328

117717

27

118966

22

119775

279

ST281

71

119794

71

ST282

2073

119530

73

120181

2000

D3535-15

Manufactured

No

270

Each

21.0000

1

1

**\*D3535-15\***

Wearshoe

\*\*

*ul 12/03/02*

Location

Loc Qty

Loc Code

FP001

21

73315

9

*XC*

74512

12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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# Picklist Print

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Work Order ID: 78681

**\*78681\***

Parent Item: D206-642-641

**\*D206-642-641\***

Parent Item Name: Replacement Skidtube

Start Date: 12/01/2012

Required Date: 10/02/2012

Start Qty: 1.00

Required Qty: 1.00

D3535-21

Manufactured No

270

Each

7.0000

1

1

**\*D3535-21\***

Wearshoe

\*\*

11 12/03/02

Location

Loc Qty

Loc Code

FP001

7

70380

7

D3535-35

Manufactured No

270

Each

21.0000

1

1

**\*D3535-35\***

Wearshoe

\*\*

1320332 (11) 11/10/02

Location

Loc Qty

Loc Code

FP001

21

67598

1

70815

1

73311

7

74509

12

D3535-41

Manufactured No

270

Each

13.0000

1

1

**\*D3535-41\***

Wearshoe

\*\*

11 11/03/02

Location

Loc Qty

Loc Code

FP001

13

42256

13

D3536-15

Manufactured No

270

Each

23.0000

1

1

**\*D3536-15\***

Gasket

\*\*

11 12/03/02

Location

Loc Qty

Loc Code

FP002

23

73318

23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

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Page 7

Work Order ID: 78681

**\*78681\***

Parent Item: D206-642-641

**\*D206-642-641\***

Parent Item Name: Replacement Skidtube

Start Date: 12/01/2012

Required Date: 10/02/2012

Start Qty: 1.00

Required Qty: 1.00

D3536-21	Manufactured	No	270	Each	5.0000	1	1	
<b>*D3536-21*</b>								
Gasket								

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP002	5	
70464	5	

D3536-35	Manufactured	No	270	Each	32.0000	1	1	
<b>*D3536-35*</b>								
Gasket								

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP002	32	
73313	14	
74511	18	

D3536-41	Manufactured	No	270	Each	15.0000	1	1	
<b>*D3536-41*</b>								
Gasket								

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP002	15	
37353	3	
51646	12	

D3537-1	Manufactured	No	270	Each	50.0000	7	7	
<b>*D3537-1*</b>								
Wearpad								

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP002	50	
69817	5	
77036	45	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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January-12-12 10:55:23 AM

Work Order ID: 78681

**\*78681\***

Parent Item: D206-642-641

**\*D206-642-641\***

Parent Item Name: Replacement Skidtube

Start Date: 12/01/2012

Required Date: 10/02/2012

Start Qty: 1.00

Required Qty: 1.00

D3537-3

Manufactured No

270 Each

12.0000 1 1

**\*D3537-3\***

Wearpad

\*\*

B374500(v1) JH 12/03/02

Location

Loc Qty

Loc Code

FP002

12

76986

12

AN3C4A

Purchased No

270 Each

3,002.000 66 66

**\*AN3C4A\***

BOLT

\*\*

14120571 (v66) JH 12/03/02

Location

Loc Qty

Loc Code

ST350

3002

117313

2

117688

5

117872

10

118112

16

118451

2

118838

13

119749

954

120187

2000

NAS1515H3L

Purchased No

270 Each

171.0000 2 2

**\*NAS1515H3I \***

WASHER

\*\*

JH 12/03/02

Location

Loc Qty

Loc Code

FG

40

102472

40

ST277

131

118686

3

119438

28

120072

100

XZ

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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January-12-12 10:55:23 AM

Work Order ID: 78681

**\*78681\***

Parent Item: D206-642-641

**\*D206-642-641\***

Parent Item Name: Replacement Skidtube

Start Date: 12/01/2012

Required Date: 10/02/2012

Start Qty: 1.00

Required Qty: 1.00

AN960C10L

NAS1149C0332

Purchased

No

270

Each

0.0000

78

78

**\*AN960C10I \***

washer

D3683-1

Manufactured

No

270

Each

8,675.000

12

12

**\*D3683-1\***

Insert

\*\*

11170648 (78) M 12/03/02

\*\*

21 12/03/02

Location

Loc Qty

Loc Code

FP002

8675

36319

8675

D3413-1

Manufactured

No

270

Each

59.0000

1

1

**\*D3413-1\***

Ring

\*\*

1377940 (x1) M 12/03/01

Location

Loc Qty

Loc Code

ST420

2

66387

1

70773

1

ST464

55

73822

3

75478

52

ST473

2

71041

2

AN4C5A

Purchased

No

270

Each

399.0000

1

1

**\*AN4C5A\***

BOLT

\*\*

M 12/03/02

Location

Loc Qty

Loc Code

FP002

19

112243

19

ST355

380

112243

280

119017

100

x1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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# Picklist Print

January-12-12 10:55:23 AM

Page 10

Work Order ID: 78681

**\*78681\***

Parent Item: D206-642-641

**\*D206-642-641\***

Parent Item Name: Replacement Skidtube

Start Date: 12/01/2012

Required Date: 10/02/2012

Start Qty: 1.00

Required Qty: 1.00

AN960C416

NAS1149C0463

Purchased

No

270

Each

0.0000

1

1

**\*AN960C416\***

washer

D2646

Manufactured

No

270

Each

118.0000

1

1

**\*D2646\***

Aft Cap

\*\*

1117735 (x) 11/10/02

\*\*

1378018 (x) 11/10/02

Location

Loc Qty

Loc Code

FP002

118

62678

5

68280

5

70945

1

71038

4

71070

2

73294

1

73825

100

MS27039C1-05

Purchased

No

270

Each

223.0000

12

12

**\*MS27039C1-05\***

SCREW

\*\*

11/10/02

Location

Loc Qty

Loc Code

FP002

5

107008

5

ST293

218

106574

18

107242

200

x12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Qty	Part Number	Description
X	D3288-041	SKIDTUBE ASSEMBLY
1	D2600-1-240	EXTRUSION
1	D2646	AFT CAP
1	D2647	CAP
9	D2649	CROSS BOLT SPACER
6	D3275-1	CROSS BOLT SPACER
2	D3286-1	DOUBLER
2	D3286-3	SPACER
1	D3289-041	FLOAT WEB
1	D3413-1	RING
1	D3415-041	NUT PLATE
1	D3535-15	WEARSHOE
1	D3535-21	WEARSHOE
1	D3535-35	WEARSHOE
1	D3535-41	WEARSHOE
1	D3536-15	GASKET
1	D3536-21	GASKET
1	D3536-35	GASKET
1	D3536-41	GASKET
7	D3537-1	WEARPAD
1	D3537-3	WEARPAD
12	D3683-1	INSERT
64	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)
66	AN3C4A	BOLT
1	AN4C5A	BOLT
1	AN960C416	WASHER
78	AN960C10L	WASHER
2	CCR264SS3-3	RIVET
2	CR3212-4-03	RIVET
52	CR3212-4-04	RIVET
12	MS27039C1-05	SCREW (or AN3C3A BOLT)
2	NAS1515H3L	WASHER

#### GENERAL NOTES:

- MATERIAL: N/A
- FINISH: ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1  
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- IDENTIFICATION: NONE
- WEIGHT: 20.8 LBS
- DAMAGE TOLERANCE ON FWD BEND:  
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- BOND D3289-041 FLOAT WEB INTO D3288-1 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
- ALL HOLES DRILLED ON CENTERLINES EXCEPT WHERE SHOWN
- DRILL Ø0.297 HOLES FOR D3683-1 INSERTS BEFORE FINISH. INSTALL D3683-1 INSERTS AFTER FINISH
- DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3288-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX-241/291
- WELDING: PER DART QSI 004
- COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

STOP COPY  
 RETURN TO  
 ENGINEERING  
 UNCONTROLLED COPY  
 SUBJECT TO AMENDMENT  
 WITHOUT NOTICE  
 WORK ORDER  
 NO. 78681-4.6.5  
 12/01/12

RELEASED

G	REFORMAT DWG, RMV LPS-3 (ZN B6-3) RMV C'BORE & ADD SECTION K-K (ZN C2-4)	CP	09.06.17
F	SUBSTITUTE FLOAT BAG INSERT W/SPEC CTRL DWG WAS ALS7-1032-130; IS NOW D3683-1	DC	07.11.21
E	MID-FLOAT HOLES WERE MOVED 2.00" FWD AND ROTATED INBOARD AND OUTBOARD BY 17° INSERTS ARE NOW INSTALLED AT THESE LOCATIONS	MB	07.09.14
D	DIMENSIONS ADDED	DC	07.06.04
C	NEW INSERTS, SS WEARSHOES AND GASKETS	PH	06.12.19
B	CHANGE INSERTS	CP	05.03.18
A	NEW ISSUE	CP	04.05.17
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.06.17		

**DART AEROSPACE LTD**  
 HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D3288  
 REV. G  
 SHEET 1 OF 4  
 TITLE SKIDTUBE ASSEMBLY  
 SCALE NTS

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

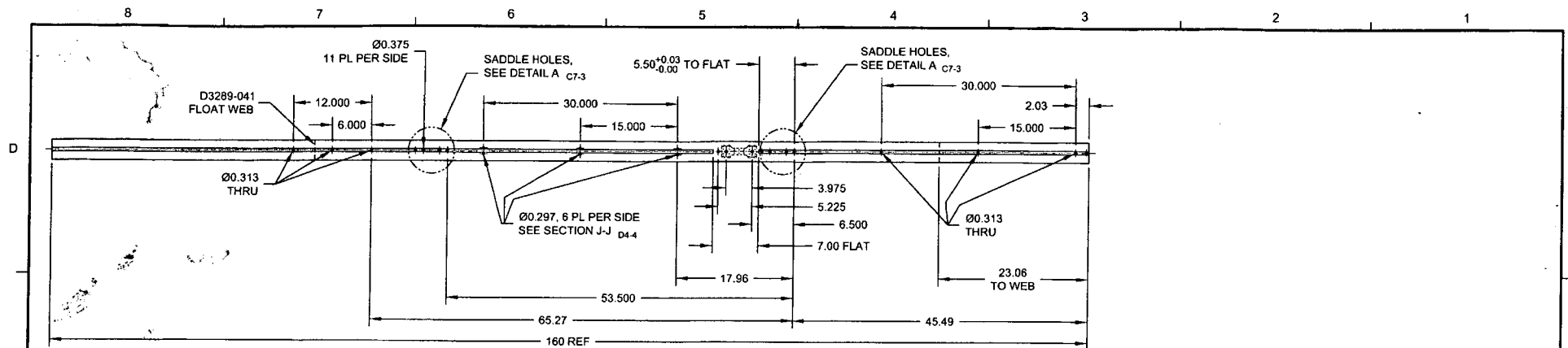
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

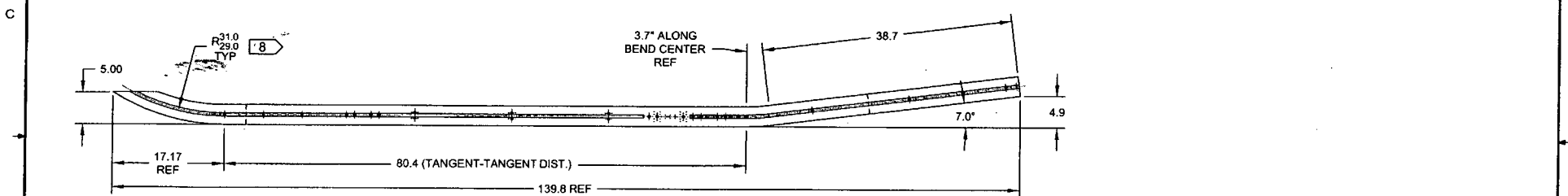
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

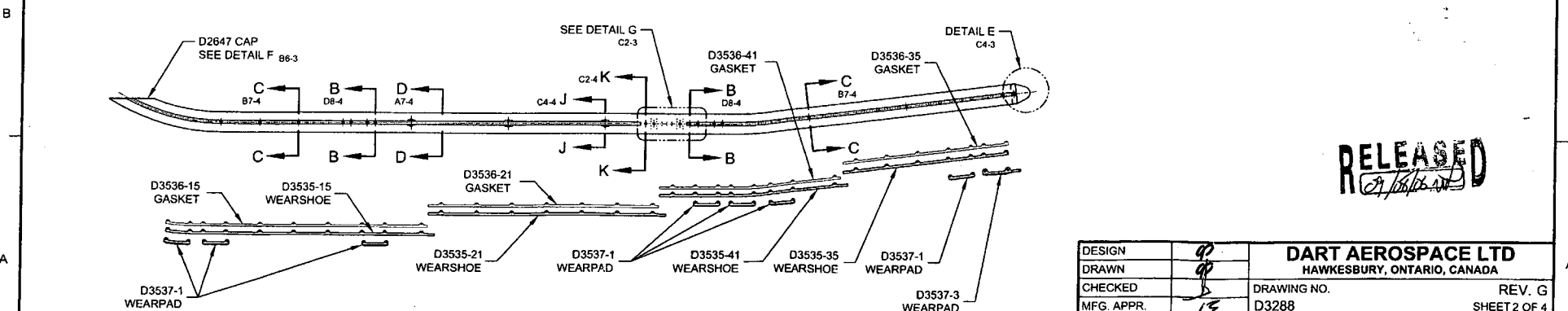
78681



**D3288-041 DRILLING/WEB ASSEMBLY DETAIL**



**D3288-041 BENDING DETAIL**



**D3288-041 WELDING DETAIL/SKIDTUBE ASSEMBLY**

RELEASED

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. G
MFG. APPR.		D3288	SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR.		SKIDTUBE ASSEMBLY	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

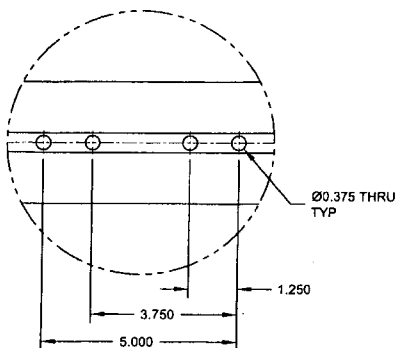
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

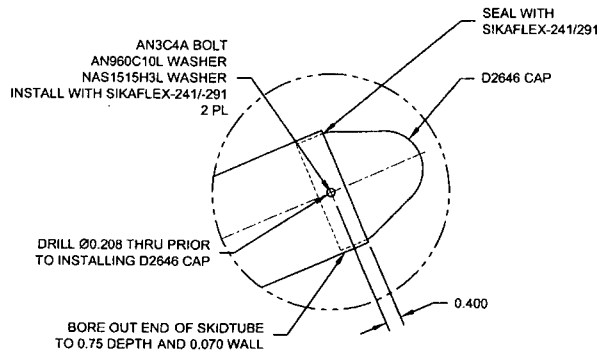
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

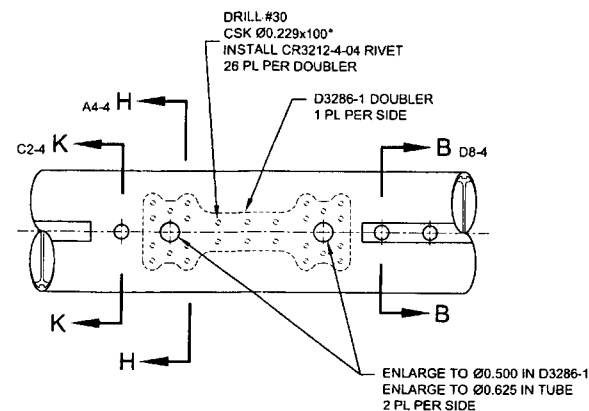
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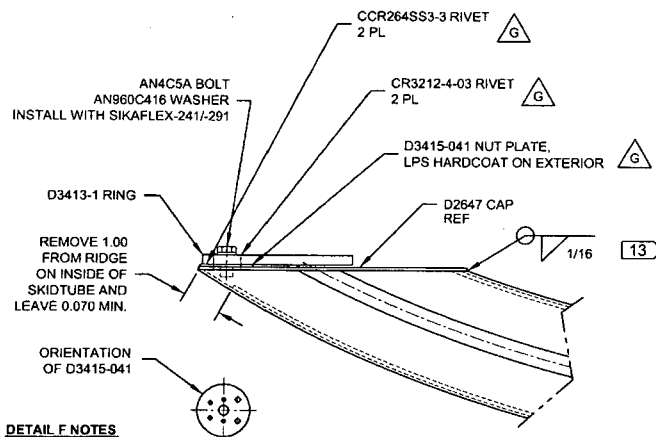
**DETAIL A: DRILL DETAIL** D6-2, D4-2  
SADDLE HOLES, SCALE 5X



**DETAIL E** B3-2  
SCALE 5X



**DETAIL G** B5-2  
SCALE 5X



- DETAIL F NOTES**
1. CUT TUBE LEVEL
  2. REMOVE RIDGE ON FWD SIDE
  3. LOCATE D2647 (TRIM AS NECESSARY)
  4. WELD D2647 IN PLACE PER DART QSI 004
  5. GRIND FLUSH
  6. RIVET D3415-041 NUT PLATE IN PLACE
- NOTE: MASK THREADS IN D3415-041 PRIOR TO FINISH

**DETAIL F: END FINISHING DETAIL** B7-2  
SCALE 5X

RELEASED  
09/06/17

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CHECKED		DRAWING NO.	REV. G
MFG. APPR.		D3288	SHEET 3 OF 4
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DE APPR.		SKIDTUBE ASSEMBLY	NTS
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

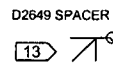
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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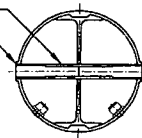
NOTE: Date & initial all entries



70681

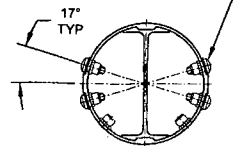


D2649 SPACER  
13



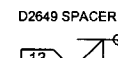
AFTER DRILLING AND BENDING  
ASSEMBLY, PERFORM THE  
FOLLOWING FOR Ø0.375  
SADDLE HOLES ONLY:  
1. CHAMFER HOLE 0.030x45°  
2. INSERT D2649 SPACER  
3. WELD INTO PLACE AND  
GRIND FLUSH  
4. C'BORE TO Ø0.313x0.75 DEEP

B7-2, B5-2, D1-3  
**SECTION B-B**  
FOR Ø0.375 SADDLE HOLES ONLY  
8 PL, SCALE 5X

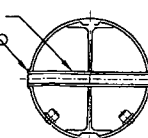


17°  
TYP

11 **SECTION J-J**  
SCALE 5X D5-2, B6-2

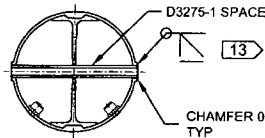


D2649 SPACER  
13



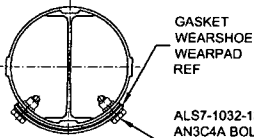
AFTER DRILLING AND BENDING  
ASSEMBLY, PERFORM THE  
FOLLOWING FOR THIS HOLE ONLY:  
1. CHAMFER HOLE 0.030x45°  
2. INSERT D2649 SPACER  
3. WELD INTO PLACE AND  
GRIND FLUSH

B5-2 **SECTION K-K**  
1 PL, SCALE 5X G



D3275-1 SPACER  
13

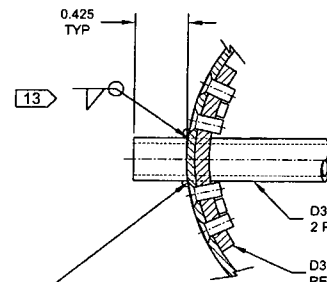
**SECTION C-C**  
FOR Ø0.313 HOLES ONLY  
6 PL, SCALE 5X B7-2, B4-2



GASKET  
WEARSHOE  
WEARPAD  
REF

12 **SECTION D-D**  
FOR WEARSHOES INSTALL ONLY  
32 PL, SCALE 5X B6-2

ALS7-1032-130 INSERT  
AN3C4A BOLT  
AN960C10L WASHER  
64 PL



0.425  
TYP

TO INSTALL D3286-1/3:  
1. GRIND OFF FLANGE IN AREA SHOWN, FLUSH  
WITH ROUND TUBE  
2. LOCATE & DRILL D3286-1 DOUBLER  
USING DT3286-1T1  
3. ENLARGE HOLES IN D3286-1 TO Ø0.500  
4. ENLARGE HOLES IN TUBE TO Ø0.625  
5. RIVET D3286-1 TO TUBE  
6. INSERT D3286-3 SPACER  
7. WELD IN PLACE AND GRIND FLUSH

**SECTION H-H**  
NOT TO SCALE D3-3

RELEASED  
09/06/17

DESIGN	97	<b>DART AEROSPACE LTD</b>	
DRAWN	97	HAWKESBURY, ONTARIO, CANADA	
CHECKED	97	DRAWING NO.	REV. G
MFG. APPR.	97	D3288	SHEET 4 OF 4
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**NOTE:** Date & initial all entries

NO. 283

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barclay Elliott  
Job number: 79243  
Part number: A206-642-151  
Description: Skid tube  
Welding Process: Tig[☒] Mig[ ]  
Base material: Alum.  
Current: AC[☒] DC[ ]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[ ]  
Penetration: pass[☒] fail[ ]

UNACCEPTABLE

Cracks: pass[☒] fail[ ]  
Undercut: pass[☒] fail[ ]  
Pin holes: pass[☒] fail[ ]  
Overlap (cold lap): pass[☒] fail[ ]  
Porosity (surface): pass[☒] fail[ ]  
Coloration: pass[☒] fail[ ]

Qualifier David Nival Date of Test Coupon 12.02.22

Welder Barclay Elliott Date of Test Coupon 12.02.22

The above named individual is qualified in accordance with AWS D17.1.2001 to weld